CalPERS

Duty Statement

Classification: **Information Technology Specialist III**

Position Number: **275-809-1415-001**　　　　　　HCM#: **2128**　　　　　　**JC-350601**

Branch/Section: **Information Technology Services Branch/ Technology Infrastructure Services Division/Data Center**

Location: **Sacramento, California**　　　　　　Telework: **Office-centered**

Working Title: **Cloud Architect**　　　　　　Effective Date: **January 10, 2023**

Collective Bargaining Identifier (CBID): **R01**　　　　　　Supervision Exercised: ☐ **Yes**　☒ **No**

The Information Technology Service Branch (ITSB) is a key member of the CalPERS executive management team and provides most, if not all, of the technology services that support the CalPERS lines of business. The organization includes a data center, programming maintenance and development staff, business development including business relations, business process improvement, and project and portfolio management. ITSB is committed to providing the technical leadership, increased business alignment, talent, transparency, and accountability in support of all of the CalPERS strategic business objectives.

Under the administrative direction of the Information Technology Manager II, the IT Specialist (ITS) III functions as the Cloud Architect and a subject matter expert (SME) for the Datacenter. The ITS III will be responsible for participating in the development of strategic plans, goals and objectives including, but not limited to: development of the technology roadmap; enterprise-wide collaboration to enable the design, engineering, and implementation of Infrastructure as Code (IaC), cloud governance, core cloud Infrastructure including networking, cloud organization polices; the most complex and critical cloud infrastructure automation. The ITS III services as an expert for public cloud services and their integration with private cloud services including their functional organization and configuration as well as operational principles and procedures.

The ITS III works effectively with contractors, vendors, professional engineers, customers, California Public Employees Retirement System (CalPERS) staff, and other stakeholders, as a technical engineering consultant. ITS III provide expert advice on the matter related to cloud application development, Investment Office, Datacenter and DevOps. ITS III conducts and/or reviews engineering studies and surveys; provides technology expertise at the senior engineer level; and consults on the specifications and maintenance of cloud automation, design and implementation services. The specialist is expected to have expert knowledge in in Azure and AWS cloud services, Dev-Ops methodologies and infrastructure as code deployments. ITS III works primarily in the system engineering domain.

Essential Functions

30%　　Works as the data center lead for IaC, cloud automation, cloud governance and cloud networking. Leads large teams on a variety of the most complex system support activities that deliver technical services to CalPERS' lines of business. Leads and participates in the design, installation, maintenance and operations of the CalPERS Hybrid Cloud environment and automation including but not limited to Azure Cloud, Amazon Web Services, IaC, cloud networking. Engineers, installs, configures, tests, monitors, improves, reports and optimizes the most complex system virtualization platform, cloud environment, and software configurations. Leads the implementation and execution of internal and industry standards, practices and processes for cloud services, software and virtualization technologies. Provides recognized technical leadership consultation to customers, clients, staff and vendors on the most complex system and virtualization issues. Provides

technical leadership and onsite coordination assistance during minor and major system continuous improvement and maintenance activities.

30%   Plans, develops and maintains an architectural roadmap that defines business needs, design principles, technology strategy and methodology, and project timelines to ensure cost effective and optimal use of resources and technology: Researches, analyzes and recommends new automation and orchestration tools and strategies; changes to existing tools and strategies and cloud security automation systems to achieve greater economy and efficiency and eliminate obsolete platforms. Engineers, installs, configures, tests, monitors, improves, reports Cloud Financial Operation (FinOps) and Security Operation (SecOps) methods, systems and procedures. Collaborates with other teams to design and implement tools that help automate end-to-end processes that involve cloud infrastructure. Writes and maintains software to solve complex cloud management and monitoring tasks, including deploying and auditing configuration, health monitoring, metric collection, capacity planning, visualization and alerting of cloud objects. Communicates extremely complex data center, cloud concepts and solutions to internal and external customers, peers, and executives in a manner that enables understanding of the business value of technology solutions.

20%   Builds effective relationships with technical and management staff of Datacenter teams, development teams, vendors, partners, contractors, solution providers and 3rd party customers. Establishes, coordinates and maintains partnership between departments, vendors, customers and third parties to provide well-engineered, cost-effective cloud and automation services and problem resolutions for the most complex cloud products and services. Meets with senior management, customers, leading industry vendors, utilities, and others to provide engineering consulting on the most complex cloud services issues. Coordinates with Information Security Office to ensure CalPERS cloud infrastructure complies with documented standards and policies. Acts as the engineer, advisor, consultant, liaison, escalation contact, and facilitator between multiple entities to obtain prompt resolution of a variety of the most complex cloud problems and related issues

15%   Maintains and improves knowledge of emerging technologies for various public cloud environments, develops staff skill sets and maintains the stability of CalPERS cloud systems. Identifies gaps in skills and involves staff in design, development, implementation, installation, procurement and troubleshooting of complex cloud problems. Provides guidance and counseling to cloud staff to support their technical and professional development; facilitates knowledge transfer and cross training; ensures the organization is prepared for succession planning. Researches emerging technologies and assists in developing a training plan for the cloud staff in order to meet the client's expectations. Performs as a lead professional engineering and IT staff to ensure Incident and Problem Management are completed in accordance with established CalPERS policies, practices, and procedures. Provides expert level support to quickly address complex outages and systems anomalies. Provides the highest level of technical leadership in connection with the maintenance and operations of data and cloud systems.

Marginal Functions

5%   Performs a variety of administrative activities that provide efficiencies to CalPERS and the section. Duties include but are not limited to the following: Workload management and participate in special ad hoc committees, staff meetings, teams and projects, time reporting and procurements. Prepares correspondence, reports, and issue papers related to data and communications software, hardware, and systems

Desirable Qualifications

- Extensive technical experience and advanced expertise with Azure, AWS, O365 and hybrid cloud environments.
- Extensive expertise with Infrastructure as Code and Dev-Ops methodologies.
- Advanced knowledge of AD, DNS, and DHCP infrastructure services management and maintenance
- Extensive experience managing cloud compute, network, and software defined storage deployments including promotion process, image management, deployment standards, data transfers, backup/restore, HA/DR, security, and virtual networking at scale.
- Experience monitoring systems stability and performance and ensure system availability, reliability, and usability
- Advanced troubleshooting of complex problems, provide software fault diagnosis resolve operational issues, Interact with vendors, service teams, business leads, etc.

- Technical knowledge and experience with scripting languages.
- Experience with automated deployment technologies
- Configuration and operational experience with enterprise and hybrid cloud monitoring and management tools
- Passionate about technology and solving IT operations-focused problems
- Must be detail oriented, task driven, and have excellent oral and written communication skills
- Customer service focus is key

Working Conditions

- Occasional after hours support through remote phone support or on-site support during planned exercises and maintenance activities.
- May require monitoring a smart phone on evenings and weekends to ensure the 24x7 operations of cloud environments.

Conduct, Attendance and Performance Expectations

- Ability to maintain consistent attendance
- Ability to demonstrate punctuality, initiative, and dependability
- Ability to model and support CalPERS Core Values (Integrity, Accountability, Respect, Openness, Quality and Balance)
- Ability to model CalPERS Competencies and demonstrate proficiency in; Collaboration, Leading People, Leading Change, Driving Results, Business Acumen, Communication, and Leading Self.

I have read and understood the duties and essential functions of the position and can perform these duties with or without reasonable accommodation.

Employee Name:

Employee Signature: _____   **Date**:

I certify that the above accurately represent the duties of the position.

Supervisor Name:

Supervisor Signature: _____   **Date**: